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WHITE RIVER SHALE OIL CORPORATION

Socioeconomic Monitoring Report

Second Quarter 1983

June 30 1983

U. S. DEPARTMENT OF INTERIOR
OIL SHALE
ENVIRONMENTAL ADVISORY PANEL
Denver Federal Center

WHITE RIVER SHALE PROJECT

SOCIEOECONOMIC MONITORING REPORT

SECOND QUARTER 1983

White River Shale Oil Corporation
June 30, 1983

U. S. DEPARTMENT OF INTERIOR
OIL SHALE
ENVIRONMENTAL ADVISORY PANEL
Denver Federal Center

SUMMARY
WHITE RIVER SHALE PROJECT WORK FORCE
SECOND QUARTER 1983

1. Total Employees

Permanent	15
Temporary	155
	170

2. Marital Status

Single	28
Married, Single Status	55
Married, Family Status	87
No Response	0
	170

3. Location of Residence While on the Project

Jensen	5
Maeser	11
Naples	12
Vernal	79
Other Ashley Valley	28
Lapoint	1
Roosevelt	0
On-Site	27
Dinosaur	2
Rangely	0
No Response	5
	170

4. Work Force Origin

Local	36
Nonlocal	134
No Response	0
	170

5. Location of Permanent Residence

Local	
Jensen	1
Maeser	4
Naples	4
Vernal	13
Other Ashley Valley	10
Lapoint	1
Myton	1
On-Site	1
Dinosaur	1
Rangely	0
No Response	1
	36

New Residents*	
Jensen	2
Maeser	3
Naples	3
Vernal	20
Other Ashley Valley	12
	40

Nonlocal	
Utah	31
Idaho	0
California	7
Colorado	9
Illinois	10
Indiana	3
Kentucky	5
Other	21
No Response	8
	94

6. Type of Residence

Single Family	59
Apartment/ Condominium	40
Motel/Hotel	19
Recreation Vehicle	30
Mobile Home	15
Other	3
No Response	4
	170

7. Employees' Children

(Age)	
0-2	21
3-5	29
6-11	36
12-17	32
	118

8. Job Title

Admin/Clerical/Security	28
Carpenter/Cement	8
Electrician	2
Engineer/Technician	20
Laborer	9
Mechanic	13
Miner	43
Operator	26
Plumber/Welder	2
Supervisor	7
Truck Driver	7
No Response	5
	170

9. Previous Employment Status

Employed	106
Unemployed	62
No Response	2
	170

* Workers on the White River Shale Project that have moved to the area as a result of employment opportunities.

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PREFACE

The White River Shale Oil Corporation (WRSOC) was formed in 1974 by Phillips Petroleum Company, Sohio Shale Oil Company, and Sunoco Energy Development Co. as agent of the three owners to develop Federal Prototype Oil Shale Lease Tracts Ua and Ub. The two tracts are located in Uintah County, Utah, approximately 50 miles southeast of Vernal, Utah (Figure 1). The right to develop the tracts was obtained in June 1974 from the U.S. Department of Interior for a bonus bid of $120.7 million. Covering a total of 10,240 acres, the tracts have recoverable reserves estimated at over 700 million barrels of oil.

In 1977, due to environmental monitoring and title questions, the owner companies asked for suspension of the lease terms. That suspension continued in effect, pursuant to an injunction issued by the Federal District Court in Utah, until March 1982. On-site preparation work began in April 1982. Site work has proceeded since then in preparation for development of a room-and-pillar oil shale mine. This mine and the above-ground processing facilities are scheduled to be developed in three phases. Operation of the Phase I modular facility is planned to begin in 1988-89 (Figure 2). This would involve a 30,000 ton per day mine and shale oil production of about 17,000 barrels per day. Following the planned completion of Phase I, it is the current goal of the project owners to expand the project facilities in subsequent phases and ultimately to have a production capacity of 106,000 barrels per day in place on the leased tracts. At this level, the mine would produce 176,000 tons per day of oil shale.

It is the intention of the White River Shale Oil Corporation to cooperate with and assist public and private organizations in anticipating and mitigating socioeconomic impacts related to the White River Shale Project (WRSP). In keeping with this policy, WRSOC has established a process for monitoring the shale project's socioeconomic impacts in Utah and western Colorado. The information obtained through this monitoring process constitutes an important component of the WRSP impact mitigation program.

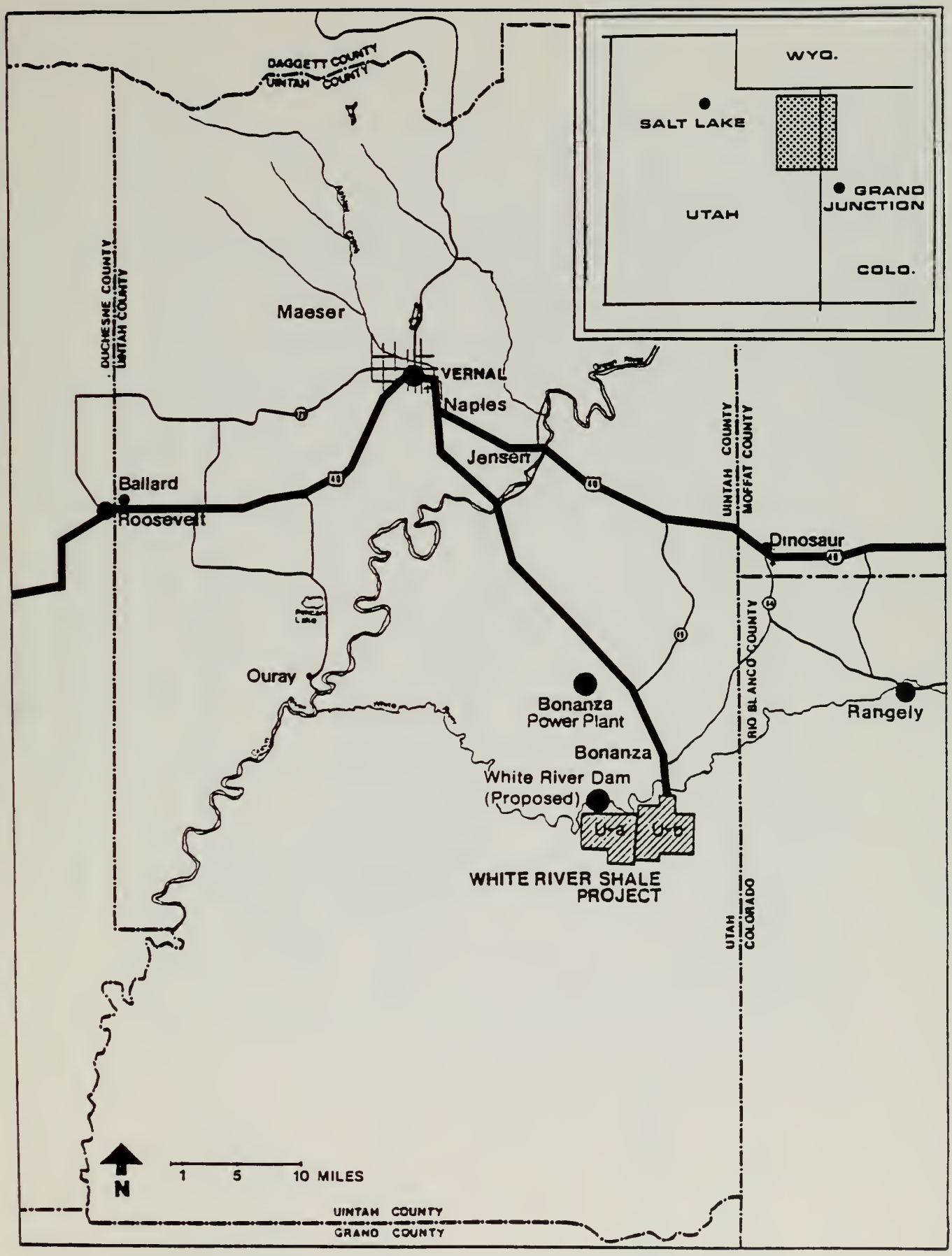
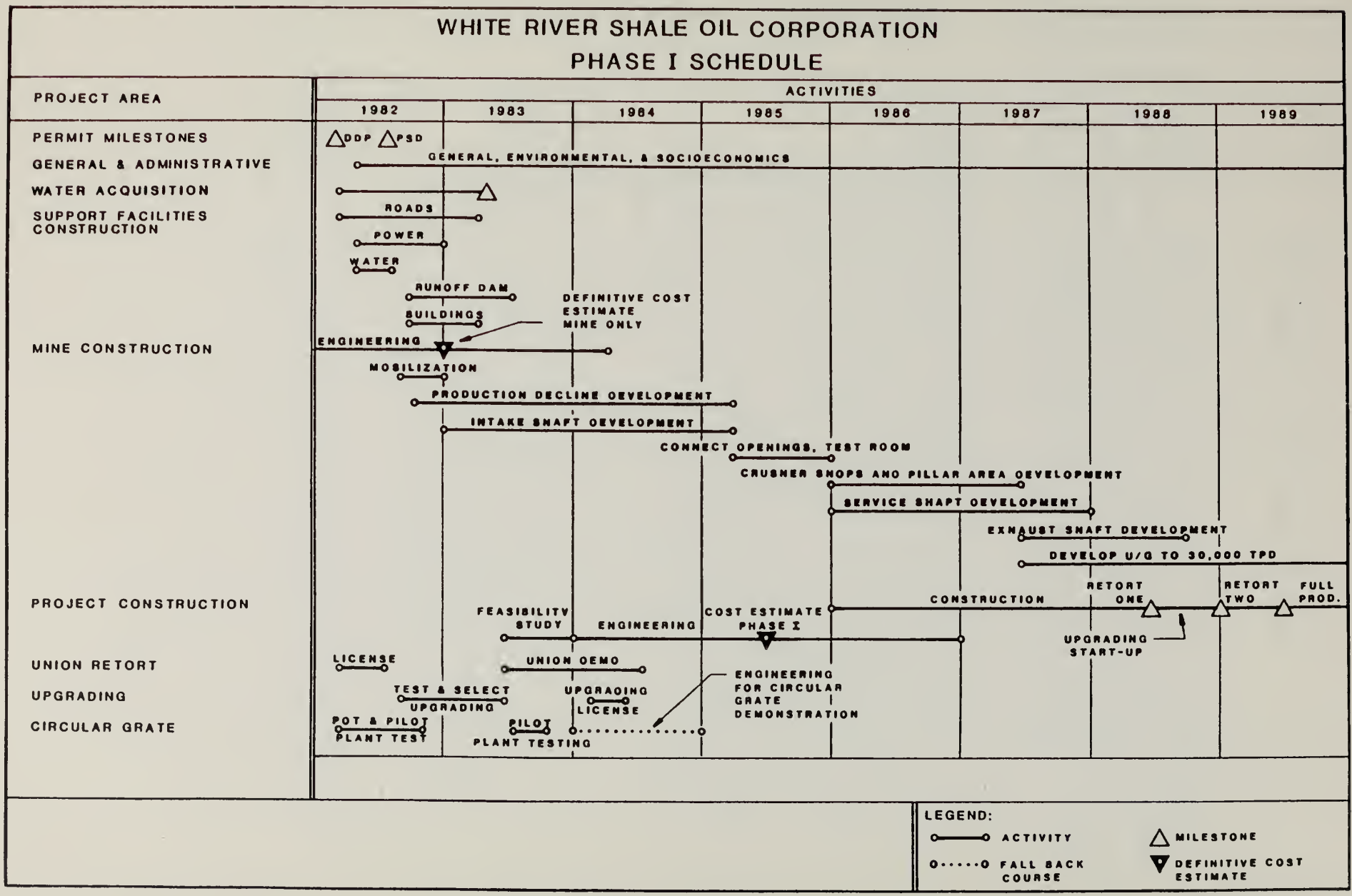


FIGURE 1: WRSP Impact Region

FIGURE 2



WRSOC C150 7-21-82

I. DEVELOPMENTS AT THE PROJECT SITE

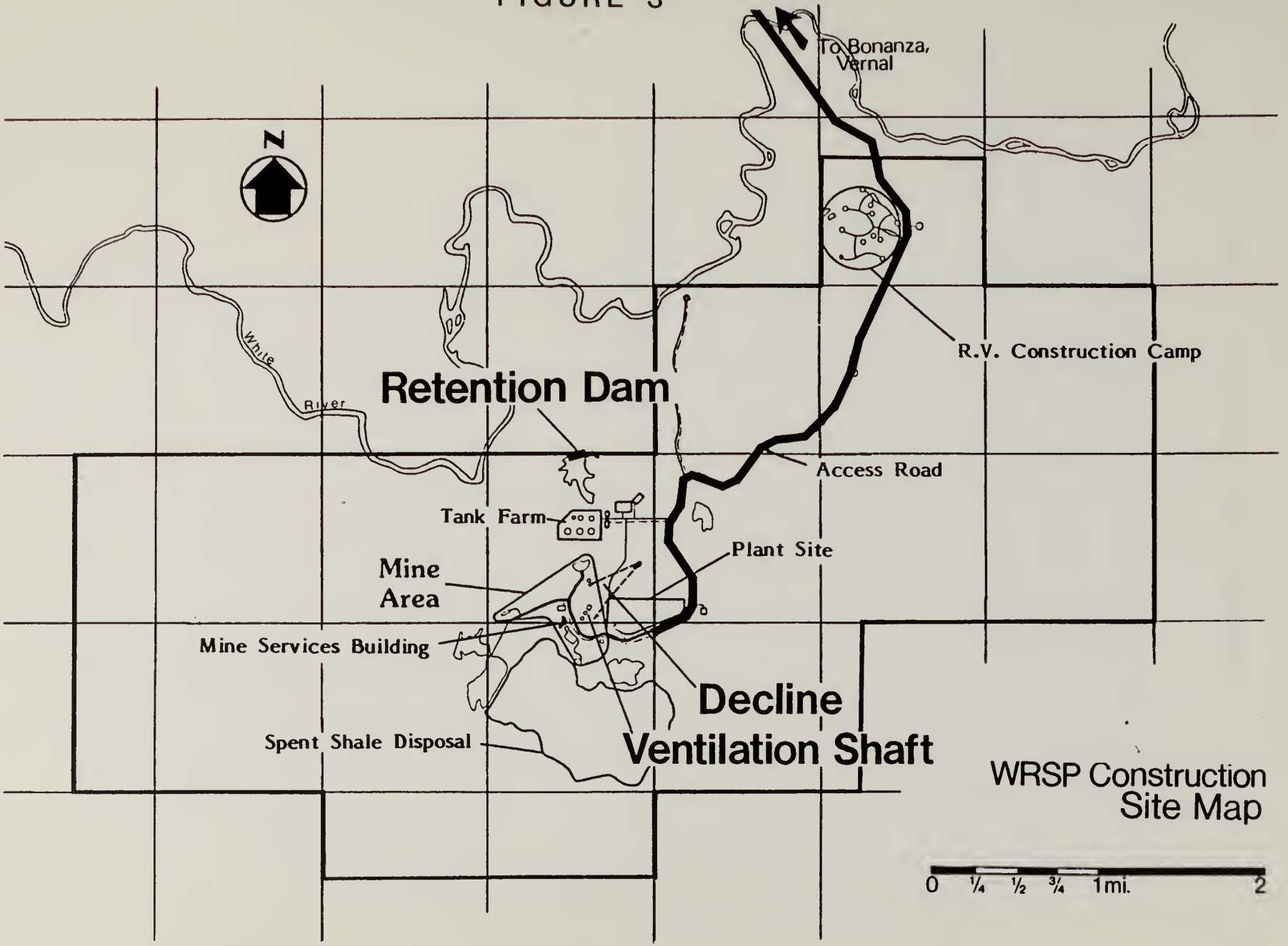
During the quarter, construction of the decline and vertical shaft continued. Work has been completed on the water and sewer treatment facilities that serve the mine services building (see Figure 3). The retention dam, which began construction in the first quarter of 1983, is nearing completion. Additional detail is provided below:

1. Construction of Decline, Shaft and Related Facilities
   Contractor: Frontier-Kemper Constructors
   Description of Work: Includes sinking of a declining underground tunnel, nearly a mile long, from the surface to the shale mining zone, and sinking of a vertical ventilation shaft. As of June 30, the decline was over 1,800 feet long. The vertical shaft also is presently under construction and has advanced to a depth of approximately 100 feet. Headframes, hoists, and a shaft collar have been installed.

2. Construction of Retention Dam
   Contractor: Clegg Construction Co.
   Description of Work: Construction of a clay core retention dam approximately 60 feet high and 600 feet across with a holding capacity of 213 acre feet. (See Figure 2 for location.)

In the third quarter of 1983, construction of the mine entries and retention dam will continue. No other projects are scheduled to commence during the third quarter.

FIGURE 3


To Bonanza, Vernal
N
White River
Retention Dam
R.V. Construction Camp
Access Road
Tank Farm
Plant Site
Mine Area
Mine Services Building
Decline
Ventilation Shaft
Spent Shale Disposal
WRSP Construction Site Map
0 ¼ ½ ¾ 1mi. 2

II. ACTUAL VS. PROJECTED WRSP EMPLOYMENT

At the end of the quarter, there were 170 persons employed on the White River Shale Project and living in northeastern Utah - northwestern Colorado. This total is expected to decrease somewhat in subsequent quarters, and the expectation is that the average annual workforce for 1983 will be approximately 150 (Figures 4 and 5).

FIGURE 4

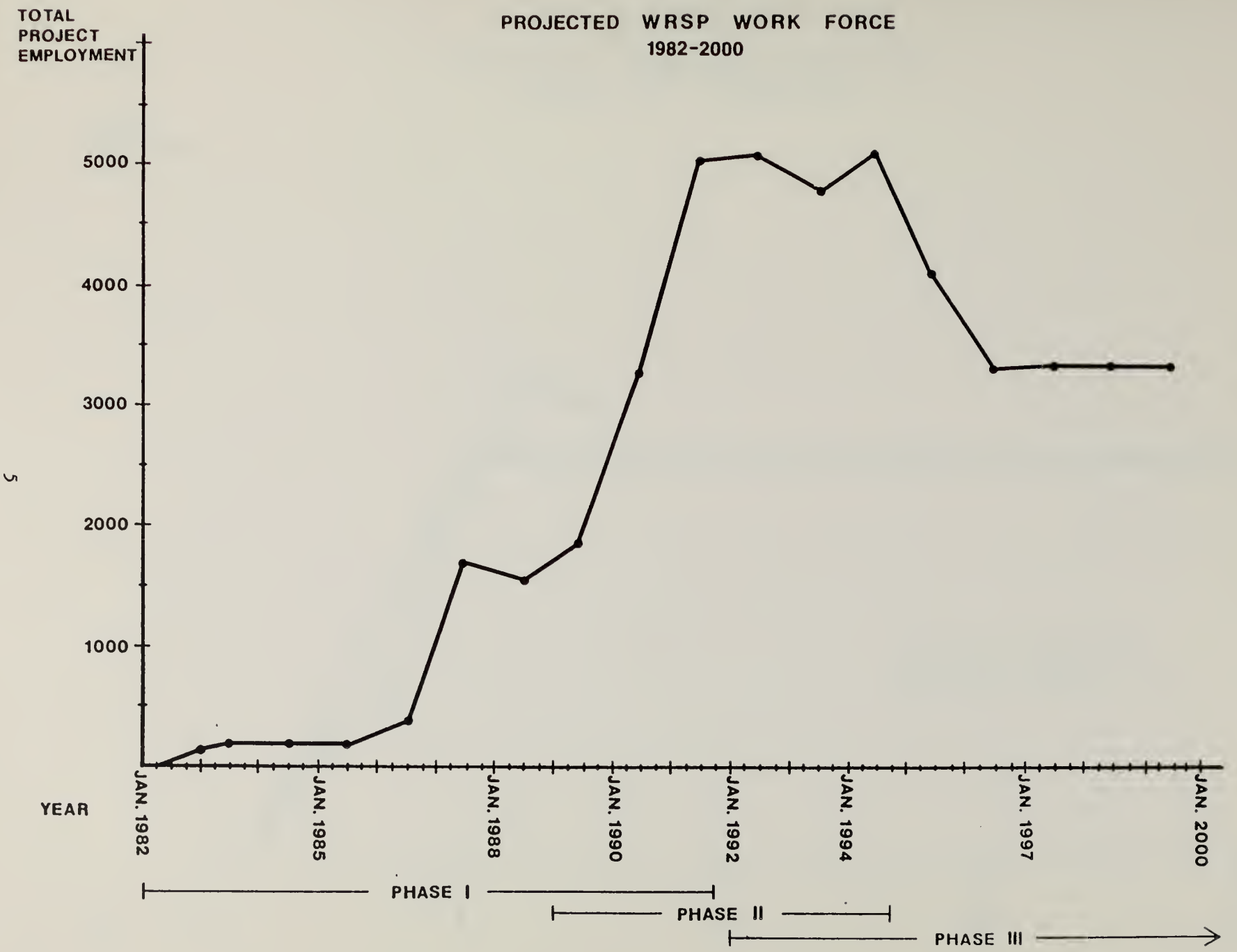
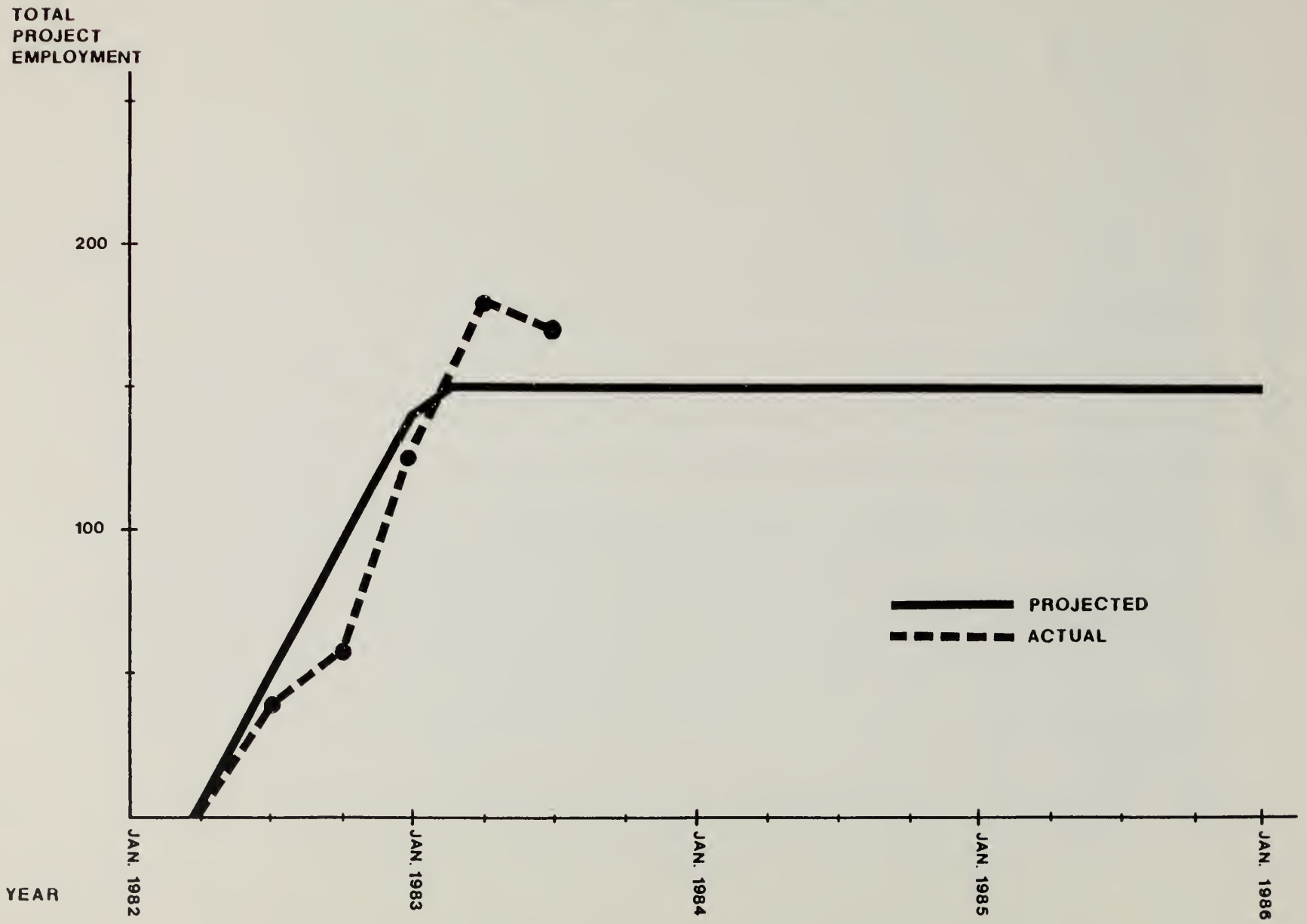

PROJECTED WRSP WORK FORCE
1982-2000
TOTAL PROJECT EMPLOYMENT
5000
4000
3000
2000
1000
YEAR
JAN. 1982
JAN. 1985
JAN. 1988
JAN. 1990
JAN. 1992
JAN. 1994
JAN. 1997
JAN. 2000
PHASE I
PHASE II
PHASE III

FIGURE 5

PROJECTED AND ACTUAL WRSP WORK FORCE
JANUARY 1982 - DECEMBER 1985



III. MONITORING DATA SUMMARY

Table I presents the results of a questionnaire compiled for the 170 persons employed on the White River Shale Project. Each person completed the questionnaire at the time he or she began work on the WRSP, and all workers updated their questionnaires in January 1983.

Table I

WRSP EMPLOYEE MONITORING DATA
SUMMARY
March 31, 1983

	CURRENT QUARTER		PREVIOUS QUARTER	
	Number of Workers	% of Work Force	Number of Workers	% of Work Force
A. GENERAL				
Permanent Employees	15	9%	15	8%
Temporary Employees	155	91%	163	92%
Total Current Employees	170	100%	178	100%
B. AGE				
18-25	45	26%	44	25%
26-30	32	19%	32	18%
31-15	25	15%	28	16%
36-40	25	15%	26	15%
41-45	21	12%	22	12%
46-50	10	6%	10	6%
51-55	10	6%	9	5%
Over 56	2	1%	3	2%
No Response	0	0%	4	2%
TOTALS	170	100%	178	101%*
Median Age:	32 Yrs.		33 Yrs.	
C. MARITAL STATUS				
Single	28	16%	33	19%
Married, Single Status	55	32%	59	33%
Married, Family Status	87	51%	82	46%
No Response	0	0%	4	2%
	170	99%*	178	100%

* Is not 100% due to rounding.

	CURRENT QUARTER		PREVIOUS QUARTER	
	Number of Workers	% of Work Force	Number of Workers	% of Work Force
D. RESIDENTIAL LOCATION				
Jensen	5	3%	7	4%
Maeser	11	6%	11	6%
Naples	12	7%	12	7%
Other Ashley Valley	28	16%	23	13%
Vernal	79	46%	77	43%
Lapoint	1	1%	0	0%
Roosevelt	0	0%	0	0%
On-site	27	16%	31	17%
Dinosaur	2	1%	2	1%
Rangely	0	0%	0	0%
No Response	5	3%	15	8%
TOTALS	170	99%*	178	99%*
E. PRESENT HOUSING				
Single Family Home	59	35%	62	35%
Apartment/Condominium	40	24%	21	12%
Mobile Home	15	9%	19	11%
Recreational Vehicle	30	18%	35	20%
Motel/Hotel	19	11%	30	17%
Other	3	2%	0	0%
No Response	4	2%	11	6%
TOTALS	170	101%*	178	101%*
F. PREFERRED HOUSING				
Single Family Home	65	38%	68	38%
Apartment/Condominium	25	15%	24	13%
Mobile Home	10	6%	18	10%
Recreational Vehicle	10	6%	17	10%
Construction Camp/ Modular Housing	4	2%	2	1%
Motel/Hotel	5	3%	15	8%
Other	1	1%	0	0%
No Response	50	29%	34	19%
TOTALS	170	100%	178	99%*

* Is not 100% due to rounding.

	CURRENT QUARTER		PREVIOUS QUARTER	
	Number of Workers	% of Work Force	Number of Workers	% of Work Force
G. ORIGIN OF WORK FORCE				
Local	36	21%	68	38%
Nonlocal	134	79%	104	58%
No Response	0	0%	6	3%
	170	100	178	99%*
H. PERMANENT RESIDENCES				
Local Work Force				
Jensen	1	3%	2	3%
Maeser	4	11%	8	12%
Naples	4	11%	7	10%
Other Ashley Valley	10	28%	20	29%
Vernal	13	36%	30	44%
Lapoint	1	3%	0	0%
Myton	1	3%	0	0%
Roosevelt	0	0%	0	0%
On-site	0	0%	1	1%
Dinosaur	1	3%	0	0%
Rangely	0	0%	0	0%
No Response	1	3%	0	0%
	36	101%*	58	99%*
New Residents**				
Jensen	2	5%	NA	
Maeser	3	8%	NA	
Naples	3	8%	NA	
Vernal	20	50%	NA	
Other Ashley Valley	12	30%	NA	
	40	101%*		

* Is not 100% due to rounding.

** Workers on the White River Shale Project that have moved to the area as a result of employment opportunities.

Nonlocal Work Force	CURRENT QUARTER Number of Workers	% of Non-Local Work Force	PREVIOUS QUARTER Number of Workers	% of Non-Local Work Force
Arizona	2	2%	2	2%
California	7	7%	4	4%
Colorado	9	10%	10	10%
Illinois	10	11%	0	0%
Indiana	3	3%	0	0%
Kentucky	5	5%	0	0%
Montana	1	1%	1	1%
Nevada	0	0%	1	1%
New Mexico	3	3%	2	2%
North Carolina	4	4%	0	0%
Washington	0	0%	1	1%
Wyoming	2	2%	2	2%
Other Non Utah	9	10%	14	13%
Utah	31	33%	59	57%
No Response	8	9%	8	8%
TOTALS	94	100%	104	101%*

* Is not 100% due to rounding.

	CURRENT QUARTER		PREVIOUS QUARTER	
I. EMPLOYEES' CHILDREN PRESENT, BY AGE				
	Number of Children	% of Total	Number of Children	% of Total
0-2 Years	21	20%	33	27%
3-5 Years	29	23%	24	20%
6-11 Years	36	33%	34	28%
12-17 Years	32	24%	31	25%
	118	100%	122	100%
Median Age:	6 Yrs.		6 Yrs.	

J. PREVIOUS EMPLOYMENT STATUS				
	Number of Workers	% of Work Force	Number of Workers	% of Work Force
Employed	106	62%	114	64%
Unemployed	62	36%	55	31%
No Response	2	1%	9	5%
	170	99%*	178	100%

* Is not 100% due to rounding.

	CURRENT QUARTER		PREVIOUS QUARTER	
	Number of Workers	% of Work Force	Number of Workers	% of Work Force
K. PLANS TO MOVE FAMILY TO AREA				
Plan to Move Family	25	15%	13	9%
Don't Plan to Move Family	58	34%	46	32%
Family Already in Area	80	47%	82	56%
No Response	7	4%	4	3%
	170	100%	145	100%
L. JOB TITLE				
Admin/Security	22	13%		
Carpenter	7	4%		
Cement Finisher	1	1%		
Clerical	6	4%		
Electrician	2	1%		
Engineer	14	8%		
Laborer	9	5%		
Mechanic	13	8%		
Miner	43	25%		
Operator	26	15%		
Supervisor	7	4%		
Technician	6	4%		
Truck Driver	7	4%		
Welder	2	1%		
Other	0	0%		
No Response	5	3%		
	170	100%		
M. TRAVEL TO WORK				
Drive Alone	79	46%	72	40%
Car Pool	80	47%	91	51%
Other	10	6%	8	4%
No Response	1	1%	7	4%
	170	100%	178	99%*

* Is not 100% due to rounding.

IV. ADDITIONAL DATA ANYALSIS

This section presents housing and demographic data while using designations of local or nonlocal workers, workers' residential location, and housing type. A local worker is defined as someone who has lived in the Uintah Basin region (includes Rio Blanco and Moffatt Counties in Colorado) for at least six months prior to beginning work on the White River Shale Project, and lists a permanent address as somewhere in the Uintah Basin region. A nonlocal worker is defined as a worker that has a permanent address outside of the region, or has been in the area less than six months prior to beginning employment at the WRSP.

A. Marital Status

Table II presents information on the residences and marital status of local workers, and Table III presents the same information on nonlocal workers. The information shows that 72% of the married workers and 83% of the single workers live in the Ashley Valley.

Of the nonlocal workforce, 16% are single, 36% are workers that are not accompanied by their families, and 48% bring families with them. Nearly 50% of the nonlocal workforce live in Vernal City, and 18% live on-site.

B. Previous Employment Status

Of the 170 employees working on the WRSP 62, or about 36%, were unemployed before beginning work on the project (Table IV). This is about the same as last quarter, when 35% indicated they were previously unemployed.

C. Workers' Children

Table V summarizes the data on workers' children. There were 118 project-related children in the region during the quarter. Of the 118, 39 were associated with the local workers, and 79 came from nonlocal families. While the local workforce only comprises 21% of the total workforce, it accounts for 33% of the children. Nonlocal children tend to live in Vernal (44), while local children are dispersed throughout Ashley Valley. The median age, 6 years, remained the same as last quarter.

D. Workers' Housing

Single family homes accommodate more of the WRSP workers than any other type. As shown in Table VI, 59 or 35% live in single family homes. Apartments and recreational vehicles follow in order of utilization.

Nonlocal workers tend to utilize single family homes (27%), apartments (28%), and recreational vehicles (19%) for housing. The use of apartments by the nonlocal workforce has increased from 11% last quarter to 28% this quarter, an increase of 22 units over last quarter.

E. Workers' Residences

Table VII and VIII show the type of residences for local and nonlocal workers by community. Local workers tend to be evenly dispersed within the Ashley Valley.

Nearly 31 percent of all nonlocal workers live in motels and apartments in Vernal City, 18% live in recreation vehicles at the job site, and 26% live in single family homes in the Ashley Valley.

F. Employees and Dependents by Locality

Table IX shows the total number of WRSP workers, spouses and dependents that are living within the region. A total of 170 workers has accounted for an overall population of 382, or an average family size of 2.25. The average family size, excluding single and single-status workers, is 3.44. The large majority of the population, 95.8%, are living within the Ashley Valley.

Table II

MARITAL STATUS OF LOCAL WORKERS
June 30, 1983

Current Residence	Single Workers	Married Workers	No Response	Total Local Work Force
Jensen	0	1	0	1
Maeser	0	4	0	4
Naples	1	3	0	4
Other Ashley Valley	1	8	0	9
Vernal	3	10	0	13
Lapoint	1	0	0	1
Roosevelt	0	0	0	0
On-site	0	3	0	3
Dinosaur	0	1	0	1
Rangely	0	0	0	0
No Response	0	0	0	0
Total Local Work Force	6	30	0	36

Table III

MARITAL STATUS OF NONLOCAL WORKERS
June 30, 1983

Current Residence	Single Workers	Married Workers, Spouse Not Living in the Area	Married Workers Spouse Living in the Area	Total Nonlocal Work Force
Jensen	0	1	3	4
Maeser	0	1	6	7
Naples	3	1	4	8
Other Ashley Valley	3	2	14	19
Vernal	9	26	31	66
Roosevelt	0	0	0	0
On-site	5	16	3	24
Dinosaur	0	0	1	1
Rangely	0	0	0	0
No Response	2	1	2	5
Total Nonlocal Work Force	22	48	64	134

Table IV

PREVIOUS EMPLOYMENT STATUS
June 30, 1983

	Previously Employed	Previously Unemployed	No Response	Total Work Force
Local Workers Living in:				
Ashley Valley	21	14	0	35
Colorado	0	1	0	1
Other	0	0	0	0
No Response	0	0	0	0
Total Local Workers	21	15	0	36
Nonlocal Workers from:				
Utah	49	21	1	71
Outside Utah	32	23	0	55
Total Nonlocal Workers	81	44	1	126
No Response	4	3	1	8
Total	106	62	2	170

Table V

WORKERS' CHILDREN PRESENT, BY AGE GROUP
June 30, 1983

Number of Children Present

Current Residence	0-2 Years		3-5 Years		6-11 Years		12-17 Years		Total Children	
	Local	Non-Local	Local	Non-Local	Local	Non-Local	Local	Non-Local	Local	Non-Local
Jensen	1	0	0	1	3	3	2	1	6	5
Maeser	1	2	1	1	4	2	3	4	9	9
Naples	0	1	0	0	0	0	0	0	0	1
Other Ashley Valley	5	4	5	5	1	4	3	5	14	18
Vernal	1	6	1	15	1	14	4	9	7	44
On-site	0	0	0	0	0	0	0	0	0	0
Roosevelt	0	0	0	0	0	0	0	0	0	0
Dinosaur	0	0	0	0	3	0	0	1	3	1
Rangely	0	0	0	0	0	0	0	0	0	0
No Response	0	0	0	0	0	1	0	0	0	1
Total Children Present	8	13	7	22	12	24	12	20	39	79

Table VI

HOUSING OF LOCAL VS. NONLOCAL WORKERS
June 30, 1983

Type of Housing	Local Workers	Nonlocal Workers	Total Work Forces
Single Family Home	24	35	59
Apartment/Condominium	3	37	40
Mobile Home	6	9	15
Recreational Vehicle	5	25	30
Motel	1	18	19
Other	0	3	3
No Response	0	4	4
Total Work Force	39	131	170

Table VII

RESIDENCES OF LOCAL WORKERS
June 30, 1983

Current Residence	Single Family Home	Apartment/ Condominium	Mobile Home	Recreational Vehicle	Motel	No Response	Total Nonlocal Workers
Jensen	1	0	0	0	0	0	1
Maeser	4	0	0	0	0	0	4
Naples	2	1	1	0	0	0	4
Other Ashley Valley	6	1	1	1	0	0	9
Vernal	9	1	3	0	0	0	13
Lapoint	1	0	0	0	0	0	1
On-site	0	0	0	3	0	0	3
Dinosaur	0	0	1	0	0	0	1
Total Local Workers	23	3	6	4	0	0	36

Table VIII

RESIDENCES OF NONLOCAL WORKERS
June 30, 1983

Current Residence	Single Family Home	Apartment/ Condominium	Mobile Home	Recreational Vehicle	Motel	No Response	Total Nonlocal Workers
Jensen	1	0	2	1	0	0	4
Maeser	6	1	0	0	0	0	7
Naples	2	4	1	0	1	0	8
Other Ashley Valley	10	7	1	0	0	1	19
Vernal	16	23	4	3	18	2	66
On-site	0	0	0	23	0	1	24
Dinosaur	0	0	0	0	0	1	1
No Response	0	2	1	0	0	2	5
Total Nonlocal Workers	35	37	9	27	19	7	134

TABLE IX
TOTAL EMPLOYEES AND DEPENDENTS
BY LOCALITIES
June 30, 1983

Current Residence	Workers	Spouses	Children	Total
Jensen	5	4	11	20
Maeser	11	10	19	40
Naples	12	7	1	20
Other Ashley Valley	28	21	33	82
Vernal	79	39	55	173
Lapoint	1	0	0	1
On-site	27	3	0	30
Dinosaur	2	1	5	8
No Response	5	2	1	8
Totals	170	87	125	382

Form 1279–3
(June 1984)

BORROWER'S CA

TN 859 .U82 W419 1983

Socioeconomic impact
monitoring report n

DATE LOANED	BORROWER

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